

CLAIMS

What is claimed is:

1. A table saw, comprising:
a table assembly having a throat for a saw blade and a table surface for receiving a workpiece; and
a bevel assembly for beveling the saw blade between a first bevel of at least approximately 45 degrees in a first direction from a plane normal to the table surface and a second bevel of at least approximately 45 degrees in a second direction from a plane normal to the table surface,
wherein the bevel assembly is capable of positioning the saw blade for providing full depth of cut when the saw blade is beveled to either of the first bevel and the second bevel.
2. The table saw as claimed in claim 1, further comprising an arbor assembly for receiving the saw blade, the arbor assembly for turning the saw blade.
3. The table saw as claimed in claim 2, further comprising a motor supported by the bevel assembly and coupled to the arbor assembly for turning the saw blade.
4. The table saw as claimed in claim 2, wherein the bevel assembly further comprises:
a mounting bracket for mounting the bevel assembly within the table saw;
a trunnion engaged with the mounting bracket for rotating with respect to the mounting bracket; and
a bevel member engaged with the trunnion, the bevel member for rotating with respect to the trunnion,
wherein the bevel member rotates within the trunnion for beveling the saw blade to between the first bevel and a third bevel at least substantially normal to the table surface, and wherein the trunnion rotates in the gudgeon and the bevel member rotates in the trunnion for beveling the saw blade between the third bevel and the second bevel.

5. The table saw as claimed in claim 4, wherein the arbor assembly further comprises a first arbor and a second arbor opposed to the first arbor, the saw blade being received on the first arbor when saw blade is beveled between the first bevel and the third bevel, and the saw blade being received on the second arbor when the saw blade is beveled between the third bevel and the second bevel.

6. The table saw as claimed in claim 4, further comprising a bevel adjustment assembly selectively engaging the mounting bracket, trunnion and bevel member beveling the saw blade.

7. The table saw as claimed in claim 6, wherein the bevel adjustment assembly further comprises a removable pin for coupling with the bevel member to the trunnion.

8. The table saw as claimed in claim 7, wherein the bevel adjustment assembly further comprises at least one stop for engaging at least one of the bevel member and the trunnion for controlling the position of at least one of the bevel member and trunnion as the saw blade is beveled between the first bevel and the second bevel.

9. The table saw as claimed in claim 6, wherein the bevel adjustment assembly comprises a worm gear.

10. The table saw as claimed in claim 2, further comprising a throat plate assembly for providing access to the arbor assembly.

11. The table saw as claimed in claim 10, wherein the throat plate assembly comprises an inner throat plate and an outer throat plate, the inner throat plate including the throat through which the saw blade extends.

12. The table saw as claimed in claim 1, further comprising a riving knife assembly.

13. The table saw as claimed in claim 1, further comprising a saw blade guard assembly.

14. The table saw as claimed in claim 1, further comprising a kickback finger assembly.

15. A bevel assembly for a table saw including a table assembly having a throat for a saw blade and a table surface for receiving a workpiece, comprising:
a mounting bracket for mounting the bevel assembly within the table saw;
an arbor assembly for receiving the saw blade so that the saw blade extends through the throat, the arbor assembly for turning the saw blade;
a trunnion engaged with the mounting for rotating with respect to the gudgeon;
a bevel member engaged with the trunnion and the arbor assembly, the bevel member for rotating with respect to the trunnion,
wherein the bevel assembly bevels the saw blade between a first bevel of at least approximately 45 degrees in a first direction from a plane normal to the table surface and a second bevel of at least approximately 45 degrees in a second direction from a plane normal to the table surface, the bevel assembly positioning the saw blade for providing full depth of cut when the saw blade is beveled to either of the first bevel and the second bevel.

16. The bevel assembly as claimed in claim 15, wherein the bevel member rotates within the trunnion for beveling the saw blade to between the first bevel and a third bevel at least substantially normal to the table surface, and wherein the trunnion rotates in the gudgeon and the bevel member rotates in the trunnion for beveling the saw blade between the third bevel and the second bevel.

17. The bevel assembly as claimed in claim 15, further comprising a support for supporting a motor coupled to the arbor assembly for turning the saw blade.

18. The bevel assembly as claimed in claim 15, wherein the arbor assembly further comprises a first arbor and a second arbor opposed to the first arbor, the saw blade being received on the first arbor when saw blade is beveled between the first bevel and the third bevel, and the saw blade being received on the second arbor when the saw blade is beveled between the third bevel and the second bevel.

19. The bevel assembly as claimed in claim 15, further comprising a bevel adjustment assembly selectively engaging the mounting bracket, trunnion and bevel member beveling the saw blade.

20. The bevel assembly as claimed in claim 19, wherein the bevel adjustment assembly further comprises a removable pin for coupling with the bevel member to the trunnion.

21. The bevel assembly as claimed in claim 20, wherein the bevel adjustment assembly further comprises at least one stop for engaging at least one of the bevel member and the trunnion for controlling the position of at least one of the bevel member and trunnion as the saw blade is beveled between the first bevel and the second bevel.

22. The bevel assembly as claimed in claim 21, wherein the bevel adjustment assembly comprises a worm gear.

23. A table saw, comprising:
a table assembly having a throat for a saw blade and a table surface for receiving a workpiece; and
means for beveling the saw blade between a first bevel of at least approximately 45 degrees in a first direction from a plane normal to the table surface and a second

bevel of at least approximately 45 degrees in a second direction from a plane normal to the table surface, wherein the beveling means is capable of positioning the saw blade for providing full depth of cut when the saw blade is beveled to either of the first bevel and the second bevel.

24. The table saw as claimed in claim 23, further comprising means for receiving and turning the saw blade.

25. The table saw as claimed in claim 24, further comprising means, supported by the beveling means, for turning the saw blade.

26. The table saw as claimed in claim 23, further comprising means for providing access to the arbor assembly.